New APS Fellows for Los Alamos announced

October 31, 2016

LOS ALAMOS, N.M., Oct. 31, 2016—Eight Los Alamos National Laboratory scientists are being honored as new Fellows in the American Physical Society (APS).

“Success in accomplishing Los Alamos’s essential national-security missions requires innovation across an incredible breadth of scientific and technical disciplines,” said Los Alamos National Laboratory Director Charlie McMillan. “The American Physical Society’s recognition of eight Los Alamos researchers as Fellows helps underscore the Laboratory’s ongoing requirements to attract and retain the best scientists in their fields. We are immensely proud of these eight individuals, and I applaud their innovative contributions to research and to helping make our world a safer place.”

The American Physical Society is a non-profit membership organization working to advance and diffuse the knowledge of physics through its outstanding research journals, scientific meetings, and education, outreach, advocacy, and international activities. APS represents over 51,000 members, including physicists in academia, national laboratories, and industry in the United States and throughout the world.

Herbert O. Funsten, Intelligence and Space Research Division: For pioneering discoveries of the global structure and dynamics of the plasma interaction of the heliosphere with the interstellar medium, and for leadership of the instrumentation that enabled these discoveries. Nominated by: APS Topical Group in Plasma Astrophysics.

Richard L. Gustavsen, Explosive Science and Shock Physics Division: For pioneering studies of the dynamic and high-pressure mechanical and chemical behavior of energetic materials, for shock initiation data used to calibrate reactive burn models, for the development and extension of photon Doppler velocimetry and magnetic particle velocity gauge methods, for mentorship of detonation physicists worldwide, and for leadership and service in the shock physics community. Nominated by: APS Topical Group on Shock Compression of Condensed Matter.

Paul Johnson, Earth and Environmental Sciences Division: For his role in originating and significantly advancing the domain of nonlinear elasticity with a primary focus on earth materials and energy reservoir imaging, and for his role in characterizing dynamical wave interactions on earth faults including fault triggering and dynamically induced memory effects. Nominated by: American Physical Society.

John L. Kline, Physics Division: For seminal contributions to the understanding and development of hohlraum drivers for inertial confinement fusion and their use for

radiation transport, hydrodynamic, and ignition science experiments. Nominated by: APS Division of Plasma Physics.

Joel D. Kress, Theoretical Division: For contributions to computational scattering, materials, and dense plasma simulation techniques. Nominated by: APS Division of Computational Physics.

Evgenya Simakov, Accelerator Operations and Technology Division: For the development of photonic-band gap accelerating structures. Nominated by: APS Division of Physics of Beams.

James H. Werner, Materials Physics and Applications Division: For pioneering contributions to single molecule tracking, optical microscopy, and the development of fluorescent probes for biological imaging and sensing. Nominated by: APS Topical Group on Instrument and Measurement Science.

Jian-Xin Zhu, Theoretical Division: For outstanding and original contributions to correlated electron systems, specifically electronic structure in unconventional superconductors and heavy fermions. Nominated by: APS Division of Condensed Matter Physics.